

NOTES FROM AN EXPEDITION FOR *OVIS POLI*

BY

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(*With two plates*)

The collection of a series of Great Pamir Sheep (*Ovis poli*) for exhibition and study purposes was one of the primary objects of the Morden-Clark Asiatic Expedition of the American Museum of Natural History, of which I was the leader, and of which James L. Clark, Assistant Director of the Museum was the other member. Mr. Clark and I left New York the latter part of January, 1926 and went to Srinagar, Kashmir, from where we started northward via the Gilgit Road.

For several years I had been working on plans for an expedition to the Pamirs and Central Asia, and during six months spent in Baltistan, Astor, Ladakh and Kashmir, I had made all possible inquiries regarding routes and seasons and the best localities in which to work. Replies to my inquiries had indicated, however, that for some ten or fifteen years there had been very few good specimens of Marco Polo's sheep brought out from the Pamirs. Opinions seemed to be divided as to the cause of the scarcity of these animals. Some said that an epidemic had decimated the once numerous herds, others that since the war, modern fire-arms in the hands of natives had caused a great thinning-out of the animals. Altogether the reports were very discouraging.

One thing, however, was noticeable. I was able to find no one who had been, for some years at least, inside the Russian border. All reports as to the numbers of sheep came from the Tagdumbash Pamir, the only portion of the range of *Ovis poli* at present available to sportsmen. It occurred to me that, were I able to obtain permission to operate in the Russian Pamirs, it might be that the sheep would be found in sufficient numbers to warrant a Museum expedition to collect a representative series. Through the courtesy of friends in India and in London, I was accorded permission to take my expedition from Kashmir directly northward through Gilgit and Hunza, and, after some negotiation with Moscow, I was also accorded special permission to enter and travel in the Russian Pamirs, which, of course, are normally strictly forbidden to foreigners.

A portion of our equipment, including arms and ammunition, sleeping bags, saddles and bridles, and most of our clothing, was taken with us from New York; tents and a few items of food we purchased in London, while the balance of our supplies we obtained from Cockburn's Agency in Srinagar. The Agency also engaged our Kashmiri staff, only one of whom needs special comment. Hassan Bat, our *Shikari*, had previously been to the Pamirs and to the Thian Shan Mountains and knew a quite useful amount of Turki. Although Hassan Bat had the usual Kashmiri failings, he served us very well.

Owing to the early season at which we were leaving Srinagar, we were requested by the Government to limit our transportation requirements to sixty coolies, as it was the planting season in the territories of Gilgit and Hunza. We took with us supplies for five months only, for after our work in the Pamirs, we expected to continue northward to the Thian Shan Mountains, collect ibex, roe-deer and such other animals as time permitted, and then push eastward to Hami, where by arrangement we were to meet Dr. Roy Chapman Andrews, Leader of the Central Asiatic Expeditions of the American Museum. With him we were to travel eastward across the Gobi Desert to China. It became necessary, however, due to Andrews' being held in Peking by the Civil War in China, for us to make our five months' supplies, eked out by what could be purchased in the bazaars of Kashgar and Urumchi, last until we reached the Trans-Siberian Railroad, just nine months after leaving Srinagar.

Travel over the Gilgit Road is so familiar to the readers of the *Journal of the Bombay Natural History Society* that there is no need of my enlarging upon the journey from Srinagar to the Mintaka Pass, except to say that we started from Bandipur on April 1st, and found heavy going over the Tragbal and Burzil Passes. Through the courtesy of Major Lock in Gilgit and Major Gillan at Kashgar, we made excellent time northward from Srinagar and crossed the Mintaka Pass on April 24th. In the Tagdumbash Pamir, snow conditions were much less severe than they had been found in the higher country near the Pass. Kirghiz encampments were found at Lupgoz and Mintaka Karaul, and from these we were able to obtain yaks for riding and transport. We were also able to use *yurts*, which are by far the most comfortable accommodation that I have ever used in the open. From Mintaka Karaul, we went to Peyik, and at that point turned from the Tagdumbash Pamir, by Peyik-jilga, to just below the foot of Peyik Pass, which there divides Chinese and Russian territory. We arrived at Peyik Pass on the 28th of April.

At our request, Major Gillan, the British Consul-General at Kashgar, had sent thirty ponies to meet us at Peyik, and eight of these we loaded with equipment which would not be needed in the Pamirs and sent them direct to Kashgar. The balance of the ponies we took with us, but found that due to the lack of forage at that season of the year, they had to be sent back to Kashgar.

On our way to Peyik, we were joined by a well-known character of the Tagdumbash Pamir, Nadir Beg, a Sarakoli from Tashkurgan,

who has been with many shooting parties both in the Tagdumbash and on the Russian side of the border. Nadir Beg was with us during the entire month spent in the Pamirs, and was of the greatest assistance to us. From him and from other Sarakolis, we heard many tales regarding the treatment which travellers in the Russian territory might expect to receive. According to them, the best that we could hope for would be arrest, robbery and deportation. Although our credentials were of the best, we thought it wise to send a messenger ahead with our papers and to await his return on the Tagdumbash side of Peyik Pass. While waiting for him, we spent a few days looking for *Ovis poli* in Peyik-jilga, but though we saw old tracks and a few old heads, it was evident that sheep were very scarce, at least at that season.

Our messenger finally returned with word that we might go ahead, so we proceeded over Peyik Pass on April 30th. About ten miles inside the border we were met by a detachment of the Russian Border Patrol, who brought a letter of welcome from the commanding officer of Kizil Rabat Post. These chaps were very friendly, and appeared clean, well-disciplined and excellently equipped. The officer in command of the detachment told us that *yurts* had been prepared for our use some five miles down the valley, and we followed our escort to them. On our way down, thirteen *poli* rams were seen on a snow field high up on the side of a mountain. Examination through glasses and telescopes showed that one, at least, carried quite an excellent head. It was a comforting sight, for we had been a little discouraged at not finding recent signs of sheep in Peyik-jilga.

After a day at that camp, we followed our escort to Kizil Rabat Post, a small mud building with two or three *yurts* and a tiny compound, about thirty miles from Peyik Pass. We were told by the commanding officer at Kizil Rabat, after he had examined our credentials, that we were free to travel wherever we wished in the Pamirs, and that, if we desired, he would arrange for *yurts* to be placed at our disposal at each camp. This was done, and except for one camp which was simply an over-night stop, it was not necessary to use tents during the month we spent in the Pamirs.

From Kizil Rabat we returned to our first camp near Peyik Pass and spent several days in hunting, but snow still lay deeply in the mountains, which made the work exceedingly difficult. We saw several bands of rams, but no large heads were seen and as the deep snow made it impossible to travel far from camp during any one day's hunt, we moved camp beyond Kizil Rabat to a location locally known as Ak-Tsoi, on the edge of the Little Pamir. Although no specimens were collected here we were able to make some sketches and studies of *poli* by observing the animal through telescopes.

After two or three days we again moved camp to Dunggelduk, the local name for a narrow *jilga* which proved to be excellent sheep country. Around that section we saw many large bands of *poli*, and it was there that we obtained four mature rams for the collection. The largest of these measured $57\frac{1}{2}$ inches around the curl, which was, with one or two exceptions, the largest we saw during our month in the Pamirs.



1.—Dung-Gelduk jilga, Russian Pamirs. Camp of the Morden-Clark Asiatic Expedition.



2.—William J. Morden and James Clark with escort of Russian Border Patrol from Kizil Rabat. (Morden *right*, Clark *left*.)



3.—Examining band of *Ovis poli* with telescopes, Russian Pamirs.



4.—*Ovis poli* ram shot by James Clark, Morden-Clark Expedition, American Museum of Natural History, Russian Pamirs, May, 1926. Curl $57\frac{1}{2}$ inches.

Previous to my work in the Pamirs, I had had considerable experience in sheep hunting, having shot seven varieties of wild sheep in North America and Asia. Before going to the Pamirs, I had made a careful study of the horns of *Ovis poli* so that I felt that I was able to judge, fairly accurately, their length when viewed through a telescope. Clark, also, was not a novice with sheep, as his position in the Museum and his private work as a taxidermist had brought him into contact with many different sheep heads from various parts of the world. It was our mature opinion that of the large number of *Ovis poli* rams which we examined through the telescope, none were appreciably larger than the ones which we collected.

From experience gained in measuring many old heads and from the study and observation of fully a thousand living animals and from the specimens which we collected, we came to the conclusion that at present the *average* length of adult *Ovis poli* horns is about 52 inches. That there are many with horns of greater length there can be no doubt, for we ourselves obtained five which measured from 55 inches to 57½ inches. It is quite possible, also, that a world's record head now ranges somewhere among the secluded valleys of the Pamirs, but we ourselves are quite positive that large heads are scarce at the present time. From our examination of old heads and those collected, it is our judgment that about 15 inches is the average base measurement of the heads of full-grown rams, although one or two of ours measured slightly over 16 inches, and there are records of base measurements of 17 inches.

Generally speaking, *Ovis poli* horns form an open spiral. This is particularly true in younger animals. Usually the horns form almost a complete circle and are not as 'nipped in' at the bottom of the first curl as is typical of the *Ovis ammon* of the Altai. There are exceptions to this rule, however. We saw several rams which carried horns of much the same type as those of *Ovis canadensis* of North America; others had the horns 'nipped in' close to the face with the wide flares typical of the Altai sheep.

Many rams with broken horns were observed during our hunting and observation. Frequently it was the right horn which was broken, though there seemed no good reason for it to be the right horn rather than the left. Often the broken stump appeared to be not much over a foot long and usually the break seemed clean and square. Horns which were broken at the top due to fighting were frequently seen; one ram with an otherwise beautiful head had the cores of both horns showing for several inches along the tops. Quite frequently the tips of the horns were broken or worn away, and nearly all of our large specimens would have been at least three inches longer had the tips been intact. Every adult male that we obtained had scars on the head due to fighting, and there were deeply rubbed spots on the front of each shoulder caused by the horns when the animal turned his head. In every specimen the hair on the back of the lower front legs was badly worn away from pawing through the snow.

Ovis poli are rather lightly built, and their bones seem very delicate for animals living in such rocky country. Neither are they exceptionally muscular, and the necks of the rams hardly seem

adequate for the carrying of such heavy heads. A carefully weighed large ram totalled 239 pounds. It must be remembered, however, that this was a spring weight, which in the fall would probably be increased by 25 to 50 pounds. All of the specimens which we collected were exceedingly thin and their ribs showed noticeably.

All the sheep collected by us were in excellent winter pelage and their heavy coats made them appear larger than they really were. Winter coats are shed about the end of May and this process was just beginning when we left the Pamirs. The coats on specimens collected in summer and early fall are short and differ somewhat from the winter pelage.

In early morning and at a distance, *poli* appear creamy white with light brownish saddles. Closer examination confirms this first impression, except that the white and the brown connect by an intermediate grayish tinge which blends the two and runs up the back of the neck. This gray fades out just behind the horns where the hair is almost white. The horns are yellow-white, something like the shade of old ivory. When the mirage of bright noon-day makes all objects at a distance indistinct, counter-shading will sometimes cause a band of *poli* to be almost invisible against slopes of broken rock, even when the animals are but two or three hundred yards away. Young lambs are a uniform dark gray, and this coloration seems to continue until after the first year, for yearlings, while lighter than lambs, are what might be termed a 'mouse-gray.'

Poli are infested with great numbers of parasites. All adult specimens collected by us had quantities of grubs under the skin; sometimes large areas, particularly along the back, would be perforated and the hair would be quite loose at those points. There were grubs also in the noses of many specimens and all were infested with ticks.

As is usual with wild sheep, in the spring-time the rams herd strictly by themselves. It was noticeable that the larger males usually kept together, though we saw a few bands which contained one or two immature rams of two or three years and we once saw a yearling with a number of full grown rams. Large herds of ewes and yearlings were common during early May, but about the 20th of the month, ewes became scarce and the yearlings were seen in groups by themselves or with one or two immature rams. We first saw new born lambs on the 24th of May and from then on in increasing numbers. Ewes undoubtedly seek secluded places among the peaks at lambing time, which would account for their scarcity on the lower levels at that season.

One morning we sighted a ewe from a distance and were attracted by her strange actions. She appeared lost, for she went uncertainly forward, gazed back, and then returned a little way, apparently to feed. It was only by careful use of the telescope that we finally distinguished the tiny dark form of a lamb stumbling along after its mother. Although the new born lambs were very wobbly for the first day or two, later when we tried to capture one of them we found that they attained surprising agility in a very few days.

During the summer, when it becomes quite hot in the middle of the day, there is a fair growth of grass over portions of the Pamir